Perspective: Significance of Lake Conestee Sediment PAHs Compared to Bramlette MGP Cleanup

Duke Energy Bramlette Rd Manufactured Gas Plant (1917-1952)	**Lake Conestee Contaminated Sediment Characteristics**
Limited Site Remediation 2002	Site Assessment 2000-2004 – No Removal
Processing residuals from MGP works • Coal oil / coal gas • Coal tar • Polycyclic Aromatic Hydrocarbons (PAHs) • Site Specific Cleanup Standards *Sum Carcinogenic PAHs* ***319 ug/kg CPAHs***	Carcinogenic PAHs in **LC sediments** • Sum of CPAHs *(mean concentration)* **4,000 ug/kg** • **>12X** Bramlette Rd cleanup standard • **3.1 Million Tons** of contaminated sediment trapped in LC ***(91X*** *mass thermally treated in 2002 Bramlette Remedial Action)* ***24,800 lbs of CPAHs = 1,148X*** *Bramlette Thermal Treatmentt Mass*
Limited Remedial Action *[soils only/no sediments]* • Contaminated soil from MGP Site removed, generally top 3 ft *[none south of Bramlette Rd]* • Most highly contaminated soil removed and treated off-site **33,944 tons** *[1655 truckloads]* • Equivalent to ~ 21.6 lbs of CPAHs • Trucked to SE Soil Recovery, Laurens Co • Thermal treatment: 2000F to destroy PAHs • Trucked back to Bramlette Rd site for fill • Additional 27,144 tons taken to Palmetto LF	Notes: • PAHs are Ecological & Human Health Risk Driver for LC • LC Remedy is **Monitored Natural Recovery** • Dependent on **containment by LC Dam** as *'Waste Containment Structure'* • **Uncontrolled Release of contaminated sediments from LC – Jun 2000-Jun 2001** ○ **128,250 tons** ○ **1,026 lbs of CPAHs** released downriver

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